## **CLAIMS**

- [1] A steam cooking apparatus comprising:
  - (a) a heating chamber in which food is placed;
  - (b) a steam generating device that generates steam to be fed to the heating chamber;
  - (c) a vapor heating heater that heats the steam generated with the steam generating device; and
  - (d) a control device that forms a cooking sequence by using, singly or in combination, a first heating mode that uses superheated steam obtained as a result of the steam being heated with the vapor heating heater and a second heating mode that uses hot air or radiation heat obtained by making the vapor heating heater produce heat without supply of steam.
- [2] The steam cooking apparatus of claim 1, wherein
  - a sequence is so set that, during a first half of cooking, heating is largely performed in the first heating mode, and, during a second half thereof, heating is largely performed in the second heating mode.
- [3] The steam cooking apparatus of claim 2, wherein a condition associated with the sequence can be changed by an operation by a user.
- [4] The steam cooking apparatus of claim 3, wherein in a case where the sequence includes both the first and second heating modes,

a duration of the first heating mode is adjusted.

[5] The steam cooking apparatus of claim 2, wherein
a duration of a heating mode that largely performs heating during the second
half of cooking can be adjusted.

The steam cooking apparatus of claim 1, wherein
a sequence is so set that, during a first half of cooking, heating is largely
performed in the second heating mode, and, during a second half thereof, heating is
largely performed in the first heating mode.

[7] The steam cooking apparatus of claim 6, wherein a condition associated with the sequence can be changed by an operation by a user.

[8] The steam cooking apparatus of claim 7, wherein in a case where the sequence includes both the first and second heating modes, a duration of the first heating mode is adjusted.

[9] The steam cooking apparatus of claim 6, wherein

a duration of a heating mode that largely performs heating during the second half of cooking can be adjusted.

[10] The steam cooking apparatus of one of claims 1 to 9, wherein

an outer circulation passage is provided outside the heating chamber,

the outer circulation passage is fitted with a blowing device that sucks in gas inside the heating chamber and then returns the sucked gas to the heating chamber, and

the steam generated with the steam generating device is fed to an air stream flowing through the outer circulation passage.

[11] The steam cooking apparatus of one of claims 1 to 9, wherein

there are provided sequence selecting means and heating time setting means or heating time/heating temperature setting means, and

when a heating time is set, an allocation of time to the heating modes in a sequence is decided based on a previously set condition.

[12] The steam cooking apparatus of claim 11, wherein

an outer circulation passage is provided outside the heating chamber,

the outer circulation passage is fitted with a blowing device that sucks in gas inside the heating chamber and then returns the sucked gas to the heating chamber, and

the steam generated with the steam generating device is fed to an air stream flowing through the outer circulation passage.

[13] The steam cooking apparatus of claim 1, wherein

in a case where a sequence in which cooking is largely performed in the first heating mode is set, a duration of the first heating mode can be adjusted, and a controlled temperature of the first heating mode is so set as to be equal to or lower than 130 °C.

[14] The steam cooking apparatus of claim 1, wherein

in a case where a sequence in which cooking is largely performed in the first heating mode is set, names and/or icons of food that can explode when inner pressure is increased by microwave heating and/or food packed in packaging that blocks a passage of microwaves are indicated in means for selecting the sequence.

[15] The steam cooking apparatus of claim 13 or 14, wherein an outer circulation passage is provided outside the heating chamber,

the outer circulation passage is fitted with a blowing device that sucks in gas inside the heating chamber and then returns the sucked gas to the heating chamber, and

the steam generated with the steam generating device is fed to an air stream flowing through the outer circulation passage.